

WHAT IS CLAIMED IS:

1. A recording and playback apparatus for encoding inputted AV signals to produce coded data and recording the coded data onto a randomly accessible recording medium and for playing back and decoding the coded data recorded on the recording medium, comprising:

production means for encoding the inputted AV signals using a first coding system to produce first coded data;

first recording means for recording the first coded data produced by said production means onto the recording medium;

supervision means for supervising the recording process by said first recording means;

readout means for reading out the first coded data recorded on the recording medium by said first recording means from the recording medium;

conversion means for converting the first coded data read out from the recording means by said readout means into second coded data corresponding to a second coding system; and

second recording means for recording the second coded data converted by said conversion means onto the recording medium;

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    said readout means, conversion means and second recording means being operable to execute the respective processes simultaneously with the recording process by said first recording means based on a result of the supervision by said supervision means.

    2. A recording and playback apparatus according to claim 1, wherein the first coding system is the MPEG2 system and the second coding system is the MPEG1 system.

    3. A recording and playback apparatus according to claim 1, wherein said conversion selects one of a process of converting the first coded data read out from the recording medium by said readout means and another process of outputting the first coded data read out from the recording medium by said readout means as they are without converting the first coded data, and said second recording means records the first or second coded data produced by the process selected by said conversion means onto the recording medium.

    4. A recording and playback apparatus according to claim 3, further comprising transfer means for transferring the first or second coded data produced by said conversion means to another electronic equipment.

    5. A recording and playback method for a recording and playback apparatus which encodes inputted AV signals

to produce coded data and records the coded data onto a randomly accessible recording medium and further plays back and decodes the coded data recorded on the recording medium, comprising:

    a production step of encoding the inputted AV signals using a first coding system to produce first coded data;

    a first recording step of recording the first coded data produced by the process of the production step onto the recording medium;

    a supervision step of supervising the process of the first recording step;

    a readout step of reading out the first coded data recorded on the recording medium by the process of the first recording step from the recording medium;

    a conversion step of converting the first coded data read out from the recording means by the process of the readout step into second coded data corresponding to a second coding system; and

    a second recording step of recording the second coded data converted by the process of the conversion step onto the recording medium;

the processes of the readout step, the conversion step and the second recording step, respectively, being

executed simultaneously with the process of the first recording step based on a result of the supervision by the process of the supervision step.

6. A program storage medium in which a computer-readable program for encoding inputted AV signals to produce coded data and recording the coded data onto a randomly accessible recording medium and for playing back and decoding the coded data recorded on the recording medium, the program comprising:

a production step of encoding the inputted AV signals using a first coding system to produce first coded data;

a first recording step of recording the first coded data produced by the process of the production step onto the recording medium;

a supervision step of supervising the process of the first recording step;

a readout step of reading out the first coded data recorded on the recording medium by the process of the first recording step from the recording medium;

a conversion step of converting the first coded data read out from the recording medium by the process of the readout step into second coded data corresponding to a second coding system; and

a second recording step of recording the second coded data converted by the process of the conversion step onto the recording medium;

the processes of the readout step, the conversion step and the second recording step, respectively, being executed simultaneously with the process of the first recording step based on a result of the supervision by the process of the supervision step.

7. A program for causing a computer, which encodes inputted AV signals to produce coded data and records the coded data onto a randomly accessible recording medium and further plays back and decodes the coded data recorded on the recording medium, to execute:

a production step of encoding the inputted AV signals using a first coding system to produce first coded data;

a first recording step of recording the first coded data produced by the process of the production step onto the recording medium;

a supervision step of supervising the process of the first recording step;

a readout step of reading out the first coded data recorded on the recording medium by the process of the first recording step from the recording medium;

a conversion step of converting the first coded data read out from the recording means by the process of the readout step into second coded data corresponding to a second coding system; and

a second recording step of recording the second coded data converted by the process of the conversion step onto the recording medium;

the processes of the readout step, the conversion step and the second recording step, respectively, being executed simultaneously with the process of the first recording step based on a result of the supervision by the process of the supervision step.